



Cold Climate Housing Research Center

**CCHRC**

## **Fairbanks Nonprofit Retrofit Pilot**

**Award No. 01458**

**Quarterly Report: July 1, 2014 to October 31, 2014**

### Denali Commission Goals & Progress

#### **1. To demonstrate bundling of contracts and efforts for audits, financing, construction, recommissioning, and monitoring.**

- We have collected information relating to potential savings by bundling auditor contracts for single, multiple and selectively bundled building audits.
- We have identified a few general and mechanical contractors that regularly participate in energy performance contracting projects who can do construction at cost of materials and labor, increasing ROI and SIR values by lowering investment costs.
- As the pilot project advances, we will evaluate potential benefits of bundling the financing, construction, recommissioning, and monitoring contracts.

#### **2. To demonstrate whether energy audits are a good predictor of cost savings. To date, there is limited documentation on commercial scale energy audit results.**

- The auditing process continued this quarter and is nearing completion. Nonprofit participants will choose which recommended retrofits to undertake in coming months. Once retrofits have been implemented we will be able to review post-retrofit energy bills as a general proxy for change in energy performance.
- Auditors, based on past experience in the industry, have different expectations about how projects develop from audit to implementation. One of the reasons little information exists about the energy savings accuracy of commercial energy audits is because few of the recommendations have been undertaken and there is relatively little feedback from end users over time.

**3. Test the theories and models in Fairbanks, Alaska where a successful outcome is expected and the margin for error is forgiving since the heat demand is so great. The opportunity for achieving cost savings is more likely than in more moderate temperate zones.**

- In progress.

**4. If successful in Fairbanks, identify lessons learned from the pilot which could be deployed to other rural Alaska communities.**

- In progress.

#### Additional Partner Goals

**1. Evaluate the potential to transition from a grant-funded model of financing energy efficiency retrofits in the nonprofit sector to a finance-funded model.**

- Some of the nonprofit participants in the pilot project have received their energy audits in the third quarter. Based on the information contained in the audit, 3<sup>rd</sup> party cost estimates and contractor bids, nonprofits board members will decide whether to pursue financing for the recommended EEMs. CCHRC will learn from the nonprofits what considerations they had when deciding whether to pursue financing. This should elucidate considerations for transitioning (at least in part) from grant funding to financing of energy efficiency retrofits.
- The first pilot EEM recommendation considered for finance is a boiler replacement at Fairbanks Resource Agency. Currently, the FRA board has approved the corporate resolution to borrow, construction is underway and the loan is being underwritten.

**2. Evaluate the importance of filling capacity gaps in the nonprofit sector (and other sectors) as a means of effectuating energy efficiency retrofits through a finance-funded model.**

- Several gaps have emerged to date.
  - There is a need for program education upfront in order to help the nonprofit become familiar and comfortable with a finance-funded model.
  - Stakeholder engagement within the nonprofit and between the nonprofit and energy auditor is essential. The existing pattern of engagement is that a specified energy audit is given to the client and the level of engagement is not sufficient to understand and act on the audit. Part of the dynamic appears to be that the funding source determines the relationship the auditor and client will have by requiring a certain type of audit for a set amount of money. This can limit flexibility of auditing services and restrict post-audit engagement.
  - Design work can be necessary in some cases in order to obtain construction bids. Without the certainty that the recommendation will be implemented, design costs typically fall on the client to pay out of pocket.

- Nonprofits have varying levels of capacity to navigate the process. While auditors, contractors, and RCAC are certainly able to contribute to some of these gaps, an overall project developer seems to be important for the following reasons:
  - To be a temporary project manager on behalf of the nonprofit; essentially keeping the stakeholders aligned and moving forward to a point of decision.
- We are working with funders to find a workable solution that doesn't involve either the client paying out of pocket or full grant funding. We are amending the pilot scope to include partial funding for necessary 35-percent design work to prevent passing the burdensome upfront costs onto the Nonprofit.

### Progress Report

- As of June 30th we had selected 11 nonprofits to participate in the pilot project. An additional building, the suicide prevention hotline, was added in late July. We may have another round of applications depending on interest and funding.
- Project partners continue to work to identify funding for the second year of the pilot project, which will enable a second construction season, one year of evaluation of retrofits performed in the first year, and the ability to apply what is learned to test different approaches to achieving the goals of the pilot project.
- Seven of the twelve audits have been completed. All of the tier I audits, resulted in further tier II auditing work.
- Achieving board approval during the loan process can be lengthy. We have collected competitive bids for EEM recommendations and found that great care is required to compare quotes and prepare board members for decision-making.
- Major milestones in the third quarter include:
  - Design cost assessments and re-scoping of auditor work plans
  - Completion of seven audits
  - Evaluation of the auditing process
  - 3<sup>rd</sup> party review of the construction costs
  - Re-bundling of EEMs
  - Development of energy efficiency education scope of work
  - Financing coordination
  - Loan execution
  - Construction bidding
  - Construction planning
  - Board Approval

- Major Milestones for the fourth quarter will include:
  - Completion of all energy audits
  - Construction bidding
  - Procuring funding for and contracting needed design work
  - Presenting loan information packages to RCAC
  - Preparation for the upcoming construction season
  - Potentially undertaking a smaller second round of pilot participants.
- RCAC and the Rasmuson Foundation have been working to determine whether deferred maintenance and depreciation categories under State and Federal grants can be used as source of repayment for energy efficiency loans.
- Assessment of project goals will begin in earnest once these steps are underway.